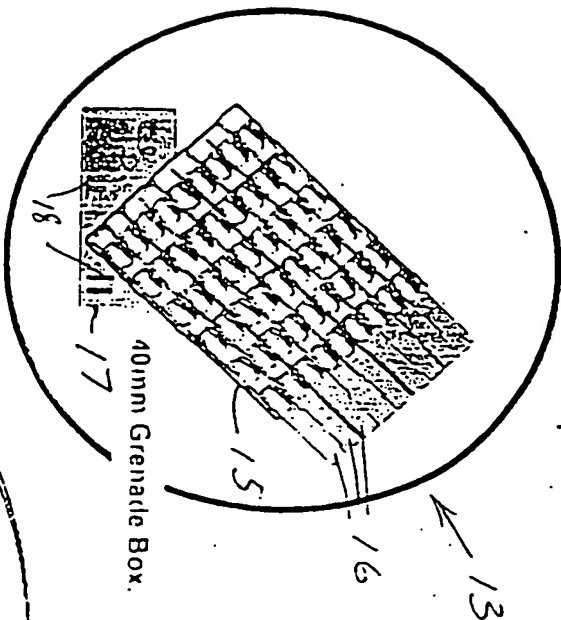




# Minefield Replacement Concept

Topic: C:



- Rapidly Deployable Minefield Replacement.
- Utilizes Metal Storm 40mm Grenade Box.
- System couples Sensor System to Grenade box.
- Box can be Trailer Mounted or placed as a Discrete Unit.
- Multiple Boxes can be Linked to Increase Power.
- Sensors Sweep surveyed area for intrusion and feed appropriate co-ord location to firing unit.
- Firing unit can select appropriate Barrel for Maximum effect, and Sequencer can fire Multiple Rounds.
- The System can be Removed Rapidly without Residual Clearance Concerns.

Multiple Rounds ensures Maximum Terminal Effect.

Array of Field Sensors / Acoustic / Seismic.

Receiver unit taking input from field sensors. RF or cable link.

Battlefield Sensor and Firing Sequencer.  
(Electro-Optic / Microwave)

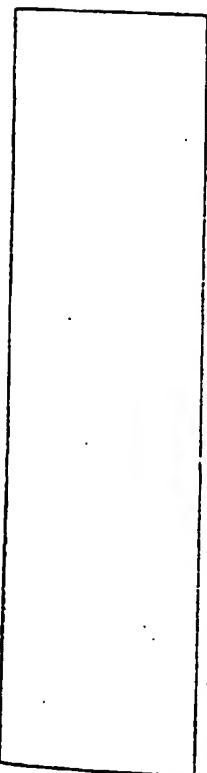
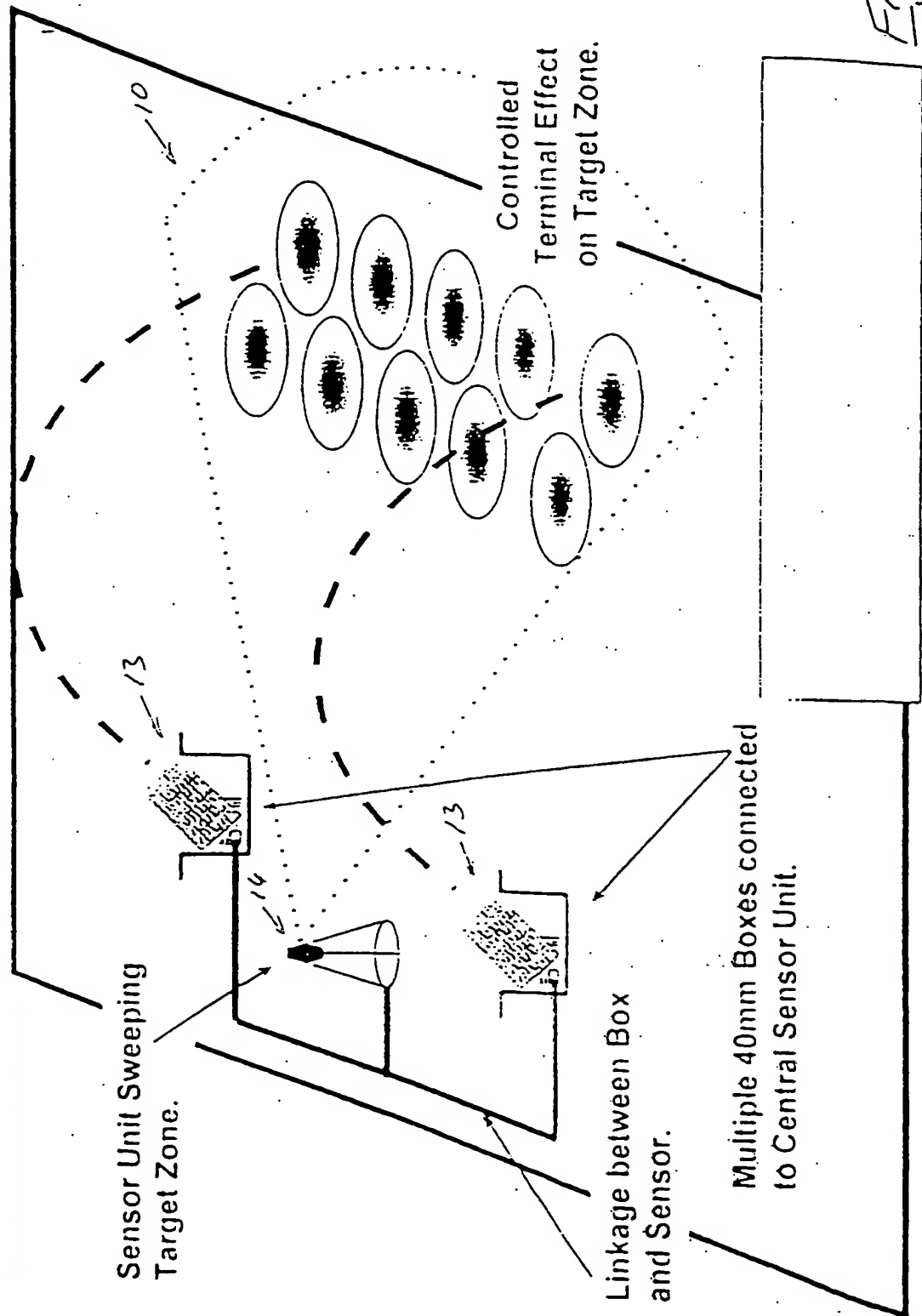


Fig. 1

# Minefield Replacement Concept

Topic: C:



# Minefield Replacement Concept

Topic: A:

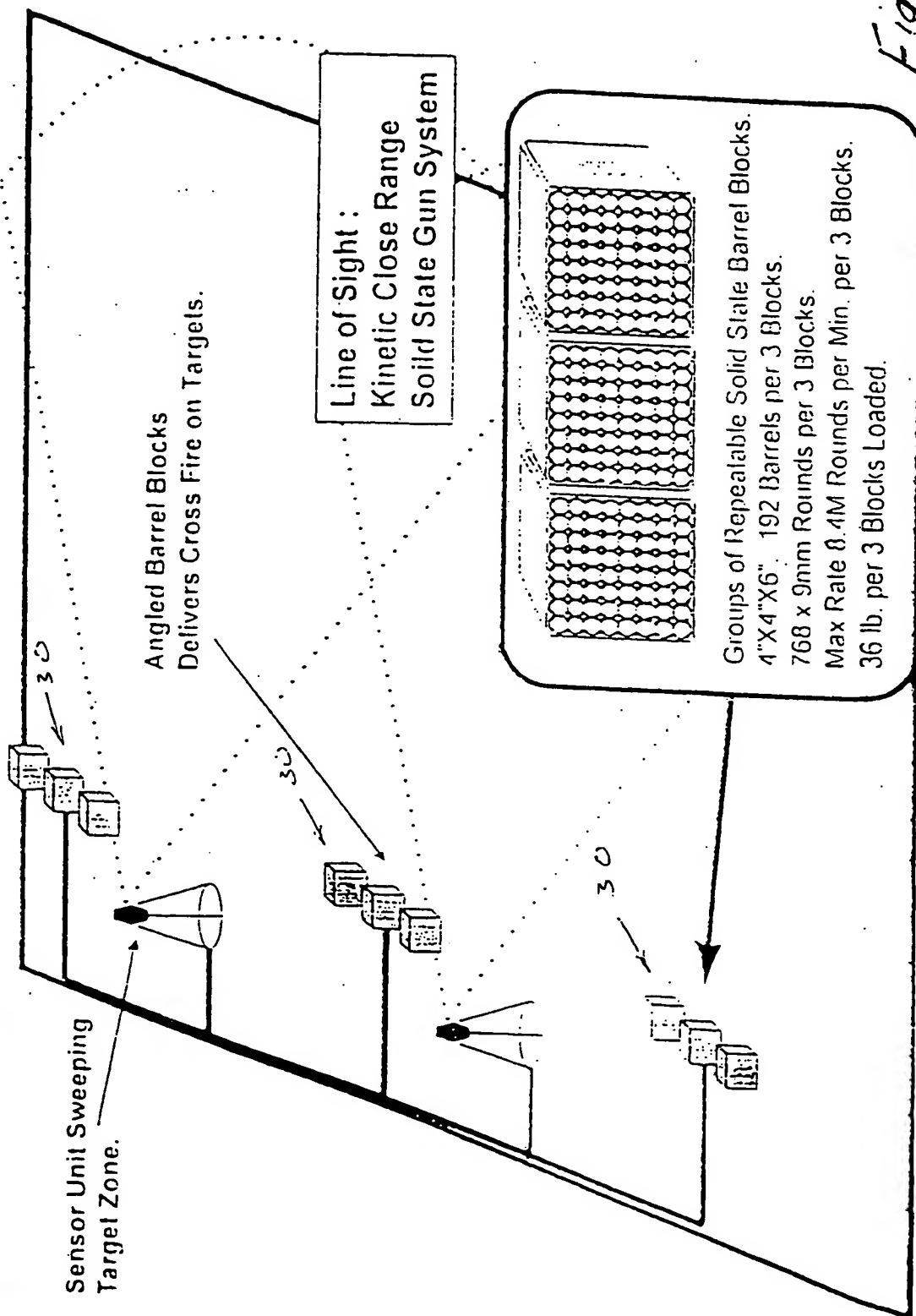


Fig 3

# Minefield Replacement Concept

Topic: B;

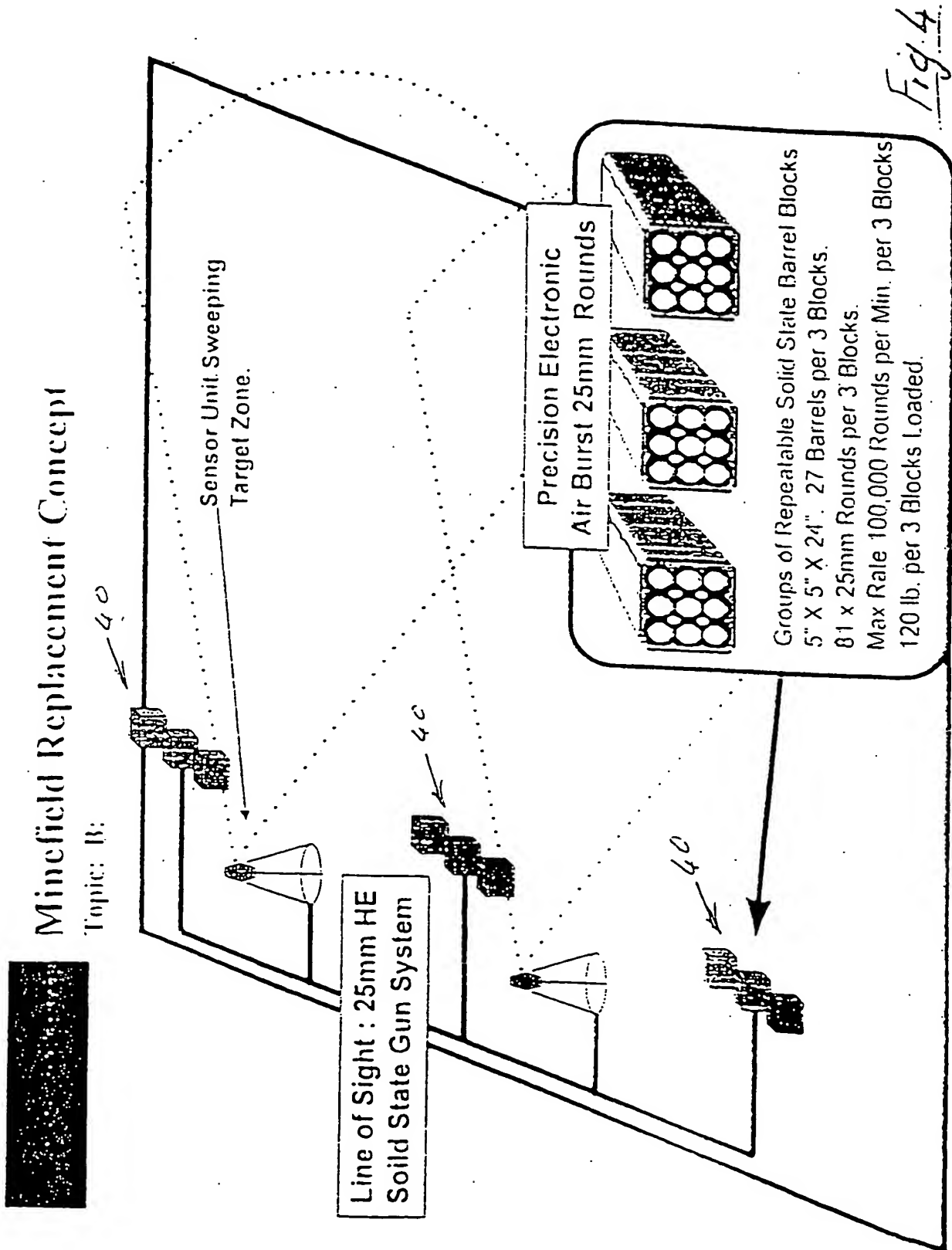
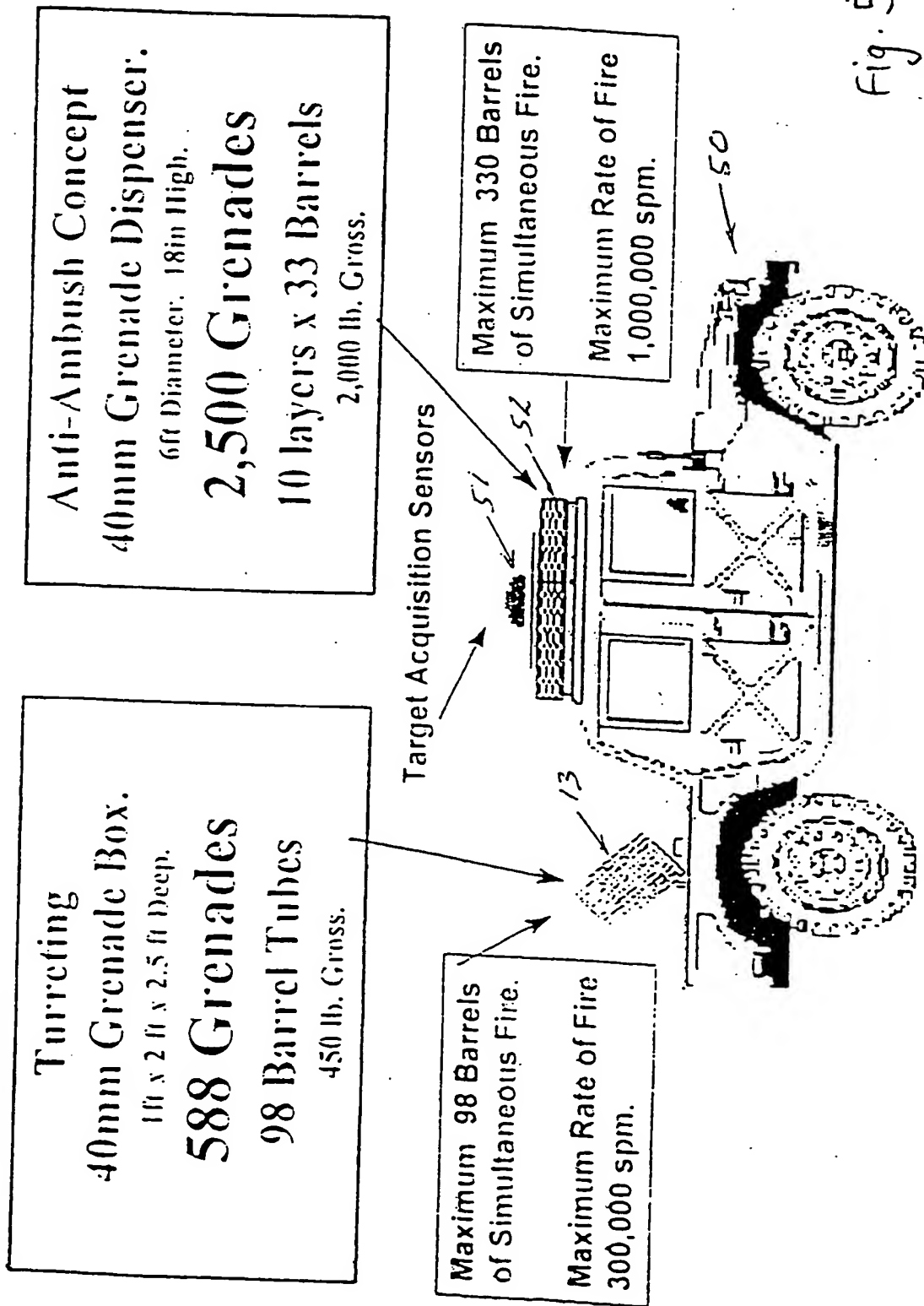


Fig. 4

# Minelfield Replacement Concept

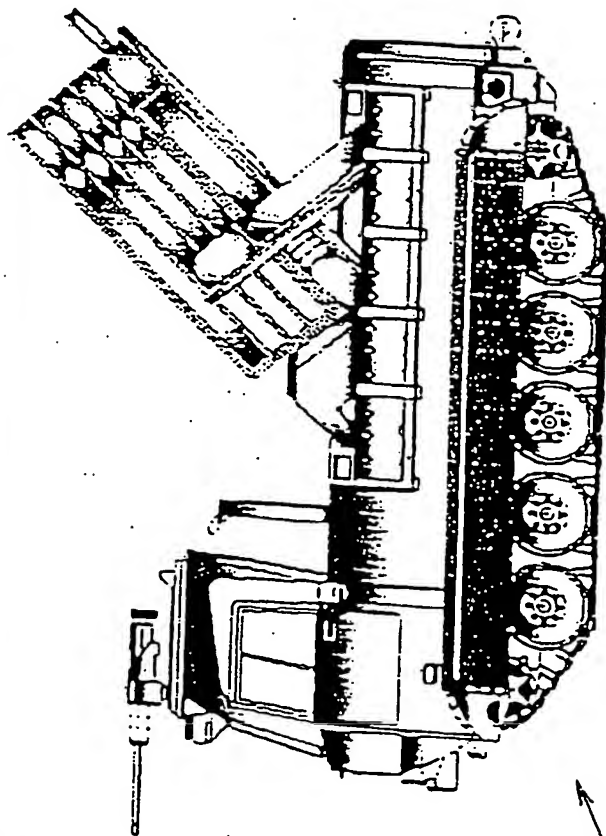
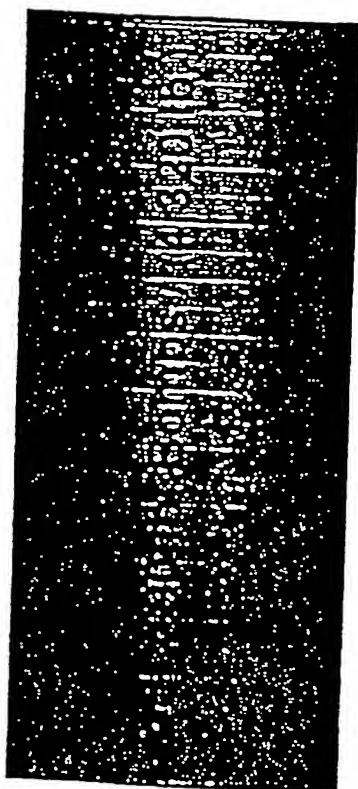
Topic: C & H;



6/12

# Minefield Replacement Concept

Topic: E:



Vehicle Mounted Mobility

Or Fixed & Turretting Battery

4,320 lb of Ordnance

Delivered in as little as 0.3 Secs.

Connected to Minefield Sensors  
and Firing Sequencer

Fully Solid-State Weapon

No Moving Parts

Electronically Variable Rate of Fire

1 Bomb per Minute up to  
a Rate of 9,600 Bombs / Min.

Fig. 6

7/12

# Minifield Replacement Concept

Topic: Ground Spikes

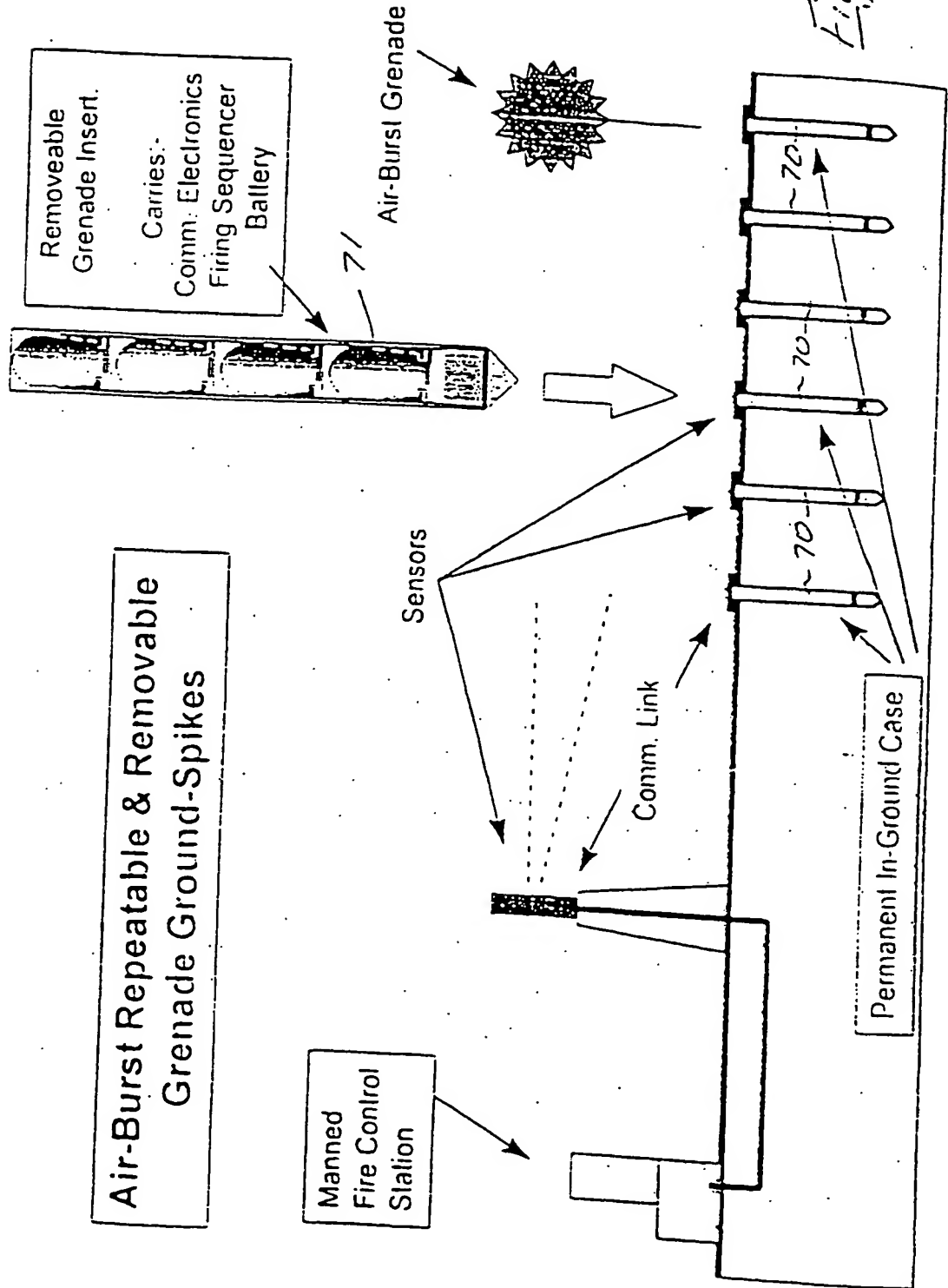


Fig. 7

8/12

# Minefield Replacement Concept

Topic: Ultra High Speed Target Printing.

First:

A Remote VDU view of the Target Area defines the appropriate Fire Sequencing Details



Second:

Four 20mm Pods Sweep the Target with the Precision of a Laser Printer. 30,000 Shots in 0.3 Secs.

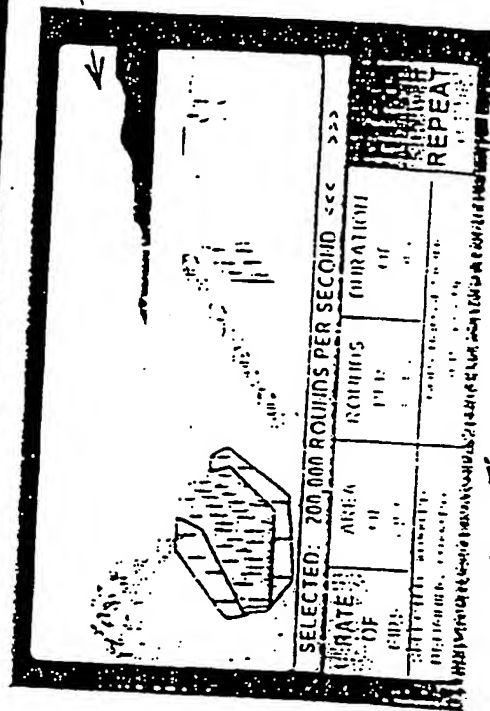


Fig. 2



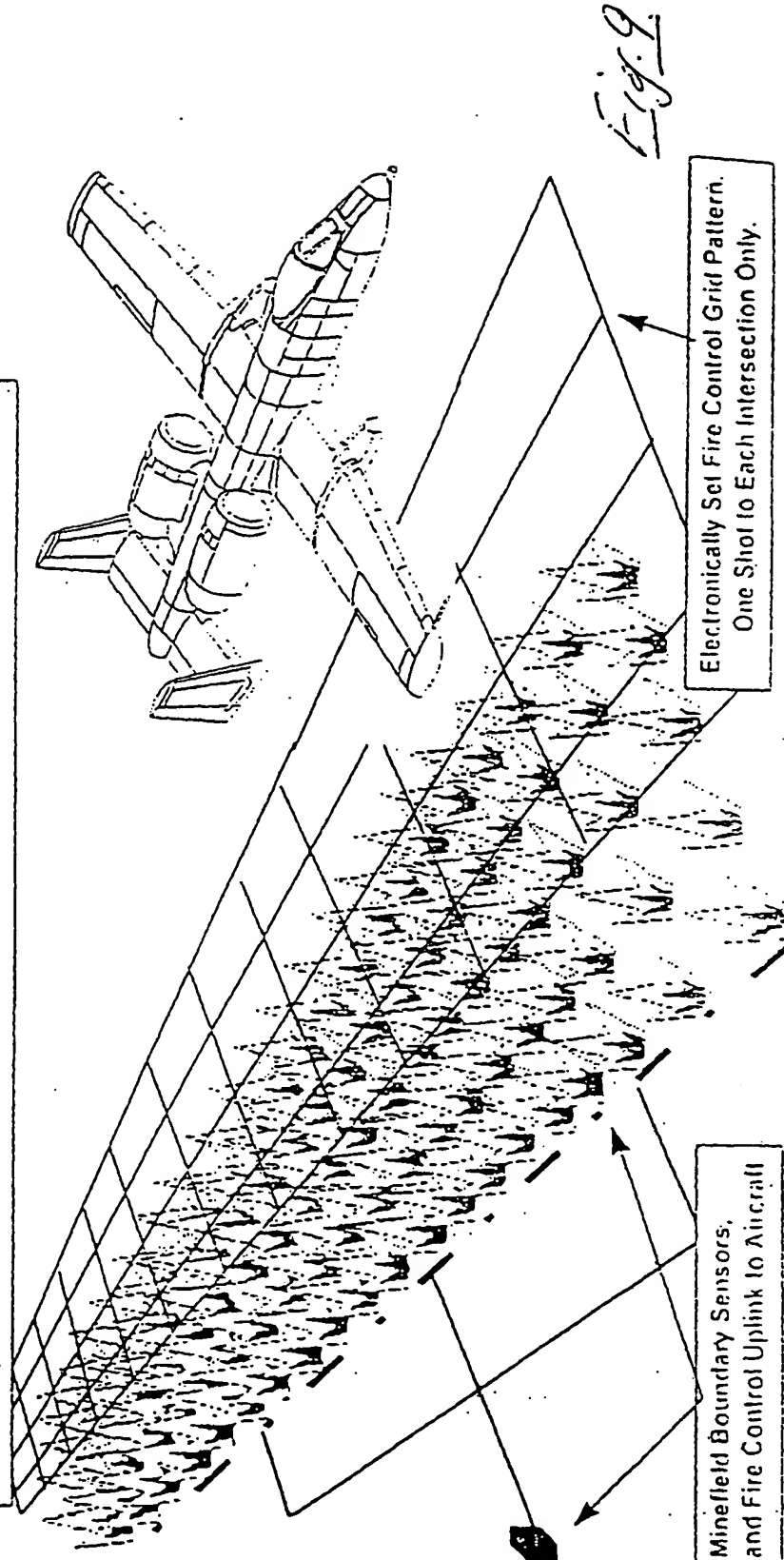
9/12

# **Minefield Replacement Concept**

Topic: G:

Filled with 4 Grenade Pods, an A-10 can deliver 21,160 Grenades from 3,528 Tubes at any Desired Rate, to a maximum 10.4 Million per Min.

Controlled by On-Ground Minefield Perimeter Sensors, the Multi-Tube / Ultra-Rapid Rate Capability Electronically Fires an Appropriate-Barrel/Appropriate-Time Burst to Deliver a Precise Impact Pattern, held Exactly to the Defined Pattern, and the Defined Perimeter.



10/12

# Minefield Replacement Concept

Topic: F:

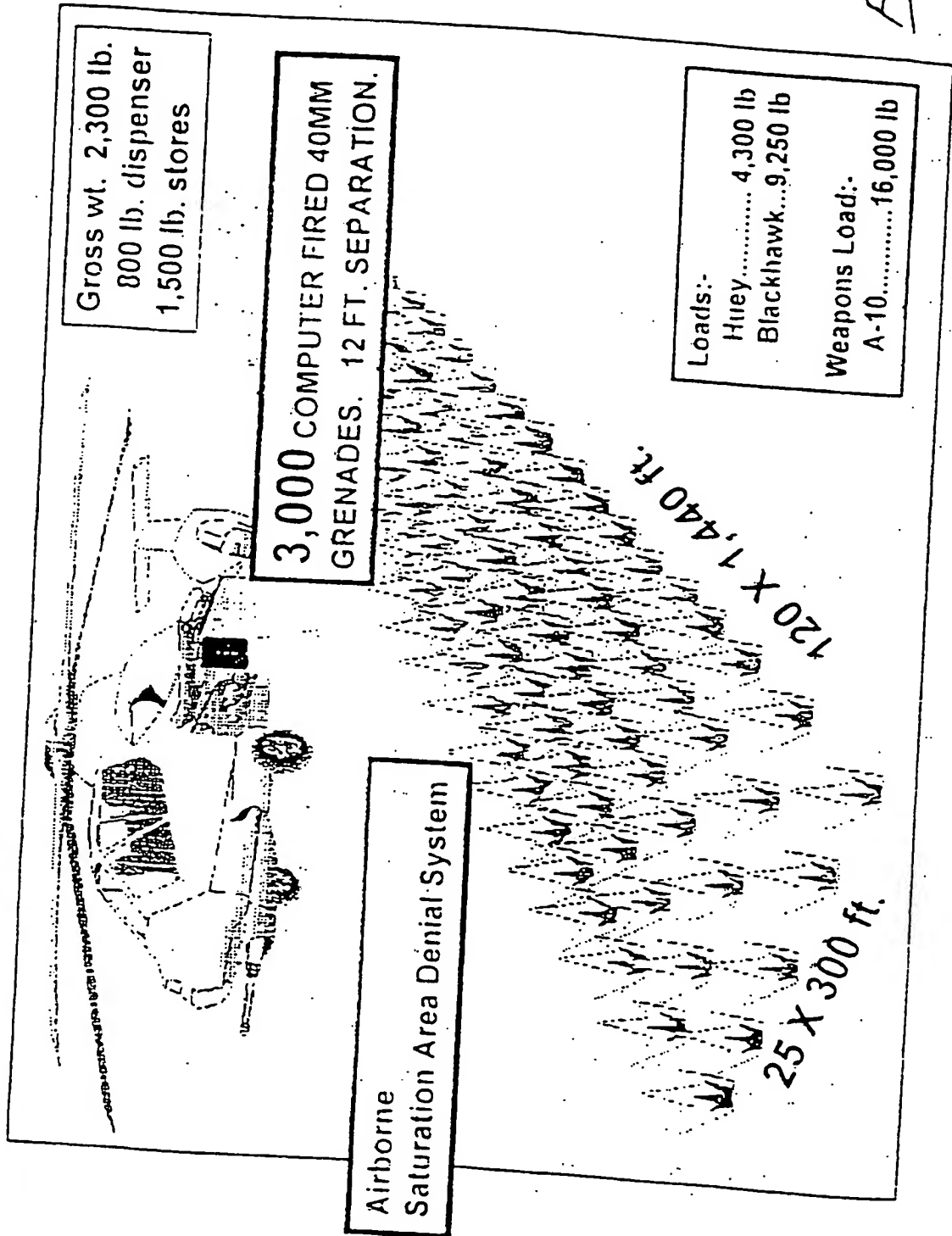
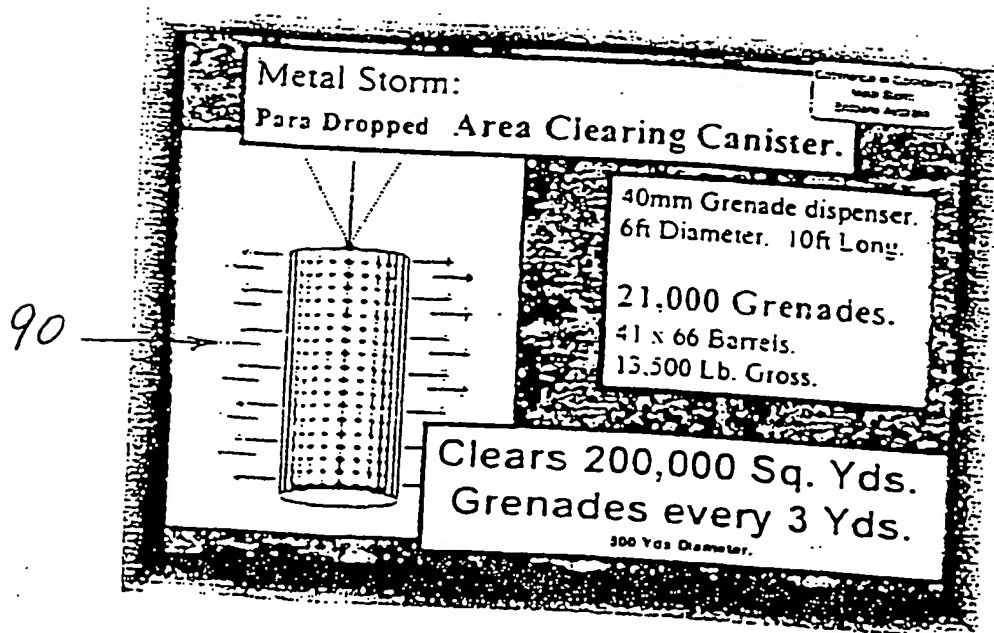


Fig. 10.

11/12

Fig. 11.

12/12

# Minefield Replacement Concept

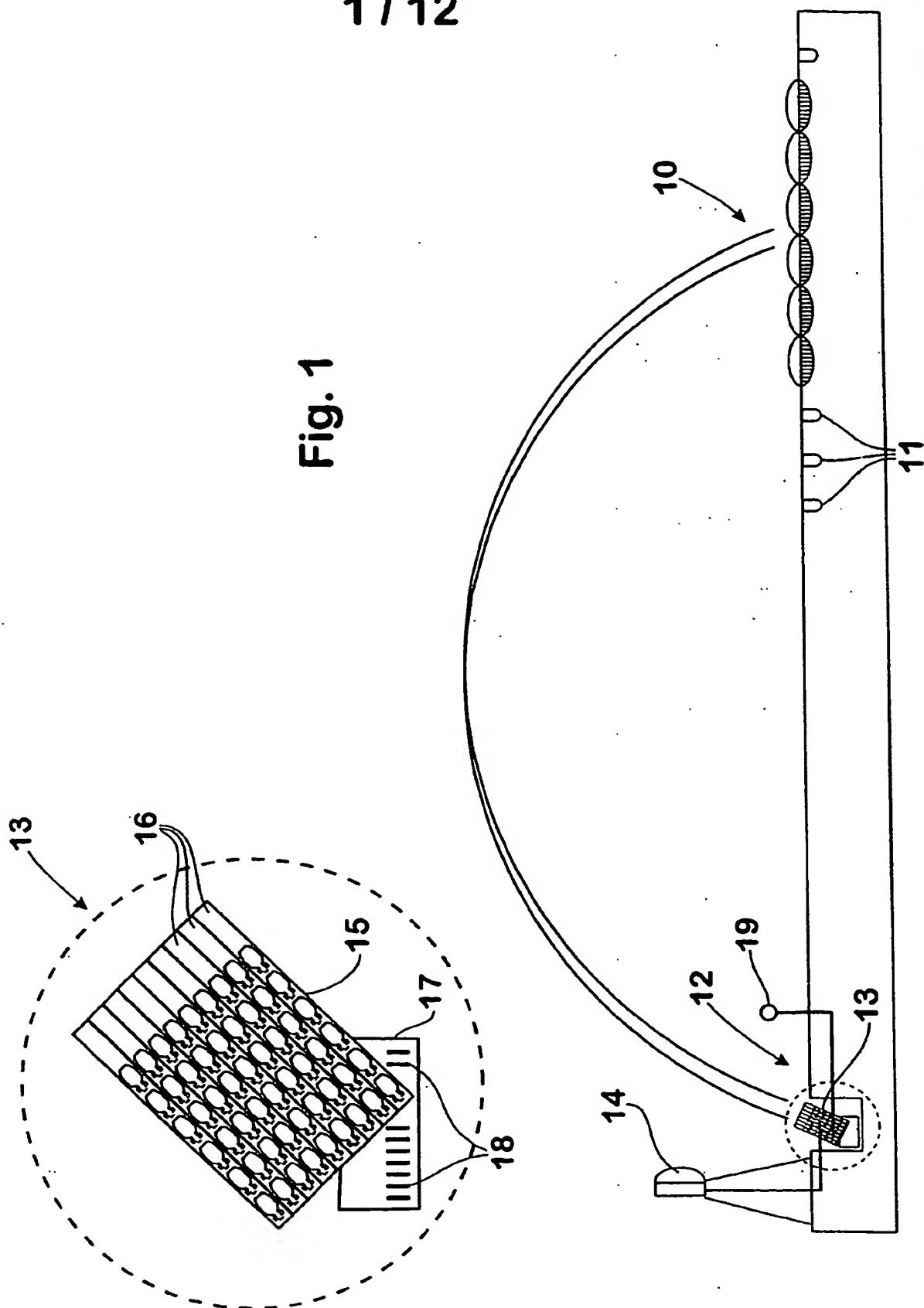
	Weapon	Range	Maximum Simultaneous	Maximum Rate of Fire	Magazine	Dimensions	Weight Loaded
A	Line-of-Sight 9mm Close-In Pod	100 yds.	192	8,401 spm	768	4" x 1" x 6" L.	36 lb.
B	Line-of-Sight 25mm Air-Burst Pod	2,000 yds.	100	600,000 spm	800	14" x 14" x 5" L.	1,120 lb.
C	40mm Grenade Box 0.5 lb. Grenade	1,700 yds.	98	300,000 spm	588	1' x 2'6" x 2' L.	450 lb.
D	81mm Mortar Box 9 lb. Bomb	6,200 yds.	36	110,000 spm	144	2' x 2' x 7" L.	2,900 lb.
E	160mm Mortar Box 96 lb. Bomb	5,600 yds.	16	9,600 spm	48	2'6" x 2'6" x 12" L.	5,400 lb.
F	Helicopter (Stand-Off) Area Denial 40mm Grenade Pods	--	500	1,500 spm	3,000	1' x 2'6" x 5" L.	2,400 lb.
G	A-10 (Stand-Off) Area Denial 40mm Grenade Pods	--	1,764	5,201 spm	10,584	1.5' x 2.5' x 12" L.	8,100 lb.
H	Vehicle Mounted Anti-Ambush 40mm Grenade Circle	1,700 yds.	330	101 spm	2,500	6' Dia. x 18" Deep	2,000 lb.
J	Man portable Repeatable 9mm Claymore	20 yds.	64	2,801 spm	256	4" x 4" x 6" L.	14 lb.

Weights are calculated for limited-use or single-use Composite Barrel Materials.  
Applications F & G can be configured as multiple-pass Loitering Cruise Missiles.

Fig. 12

1 / 12

Fig. 1



2 / 12

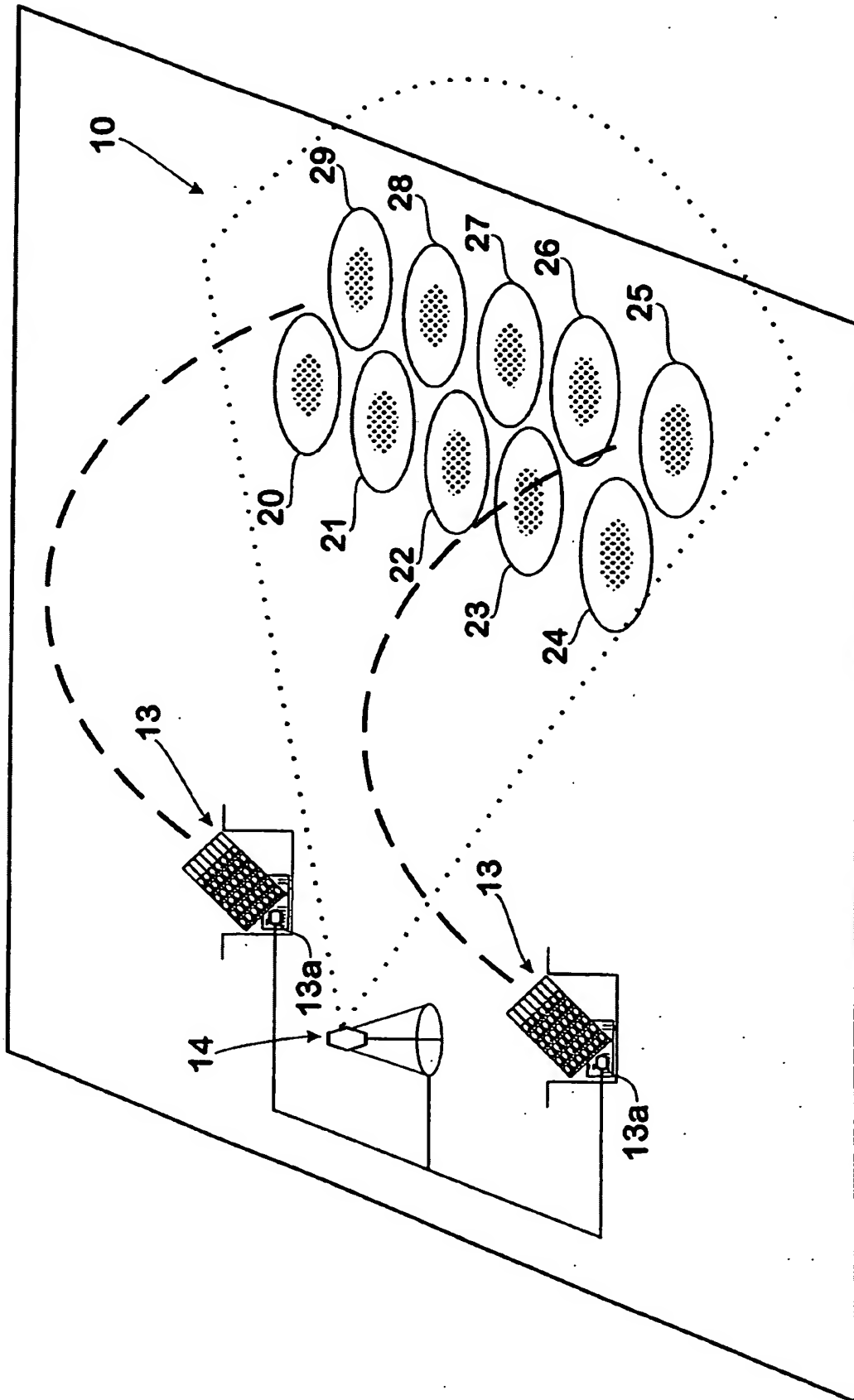


Fig. 2

3 / 12

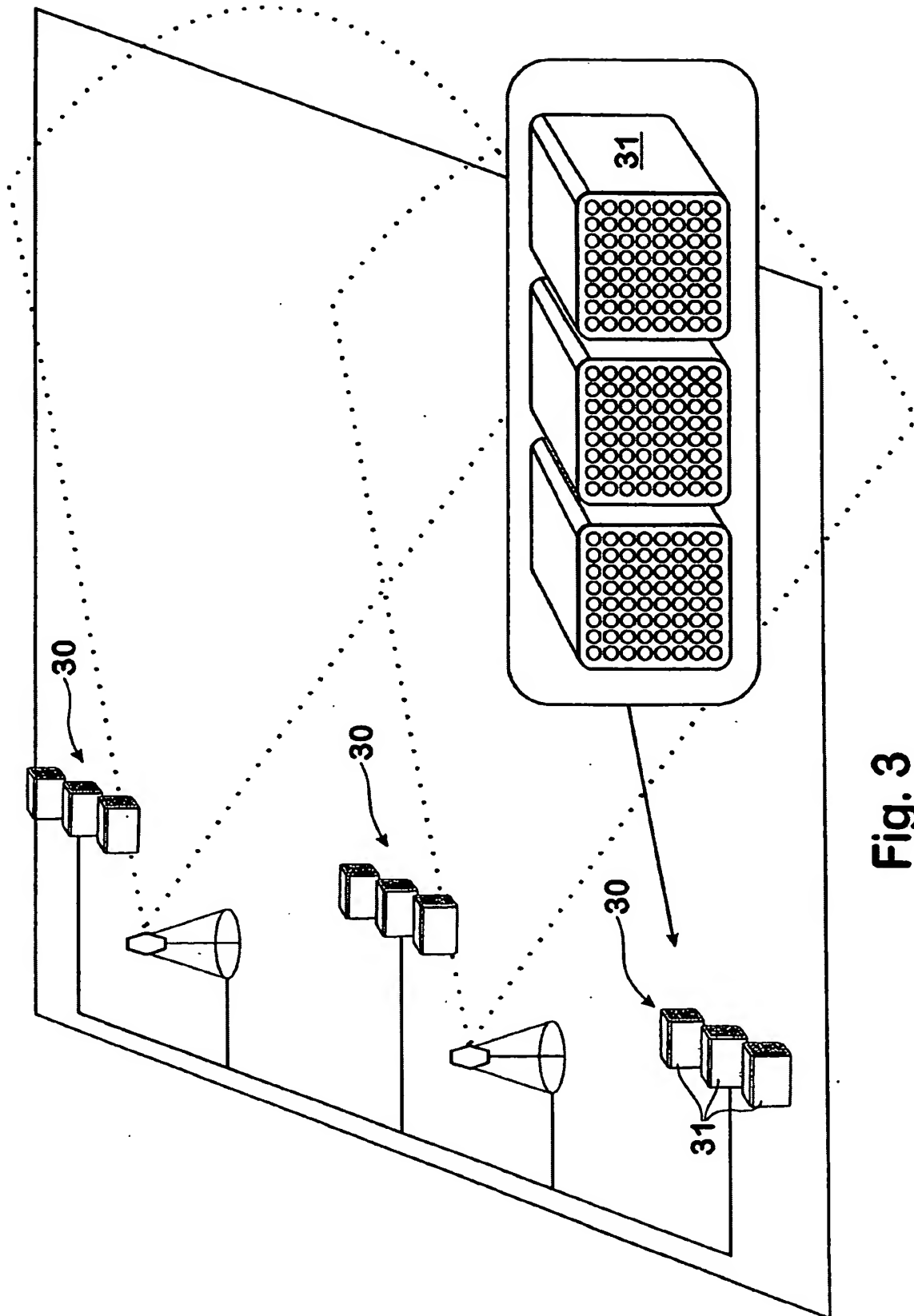


Fig. 3

4 / 12

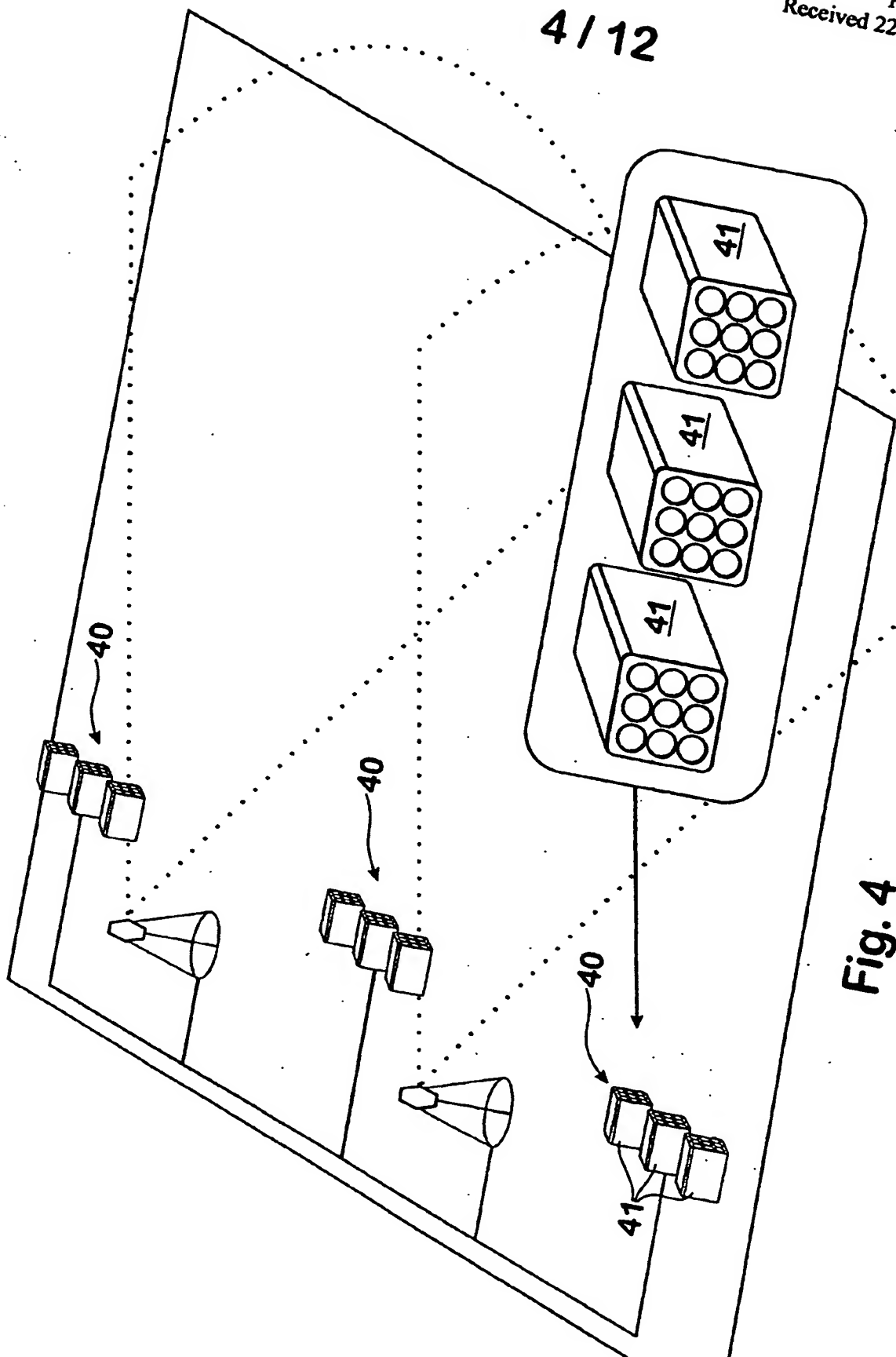
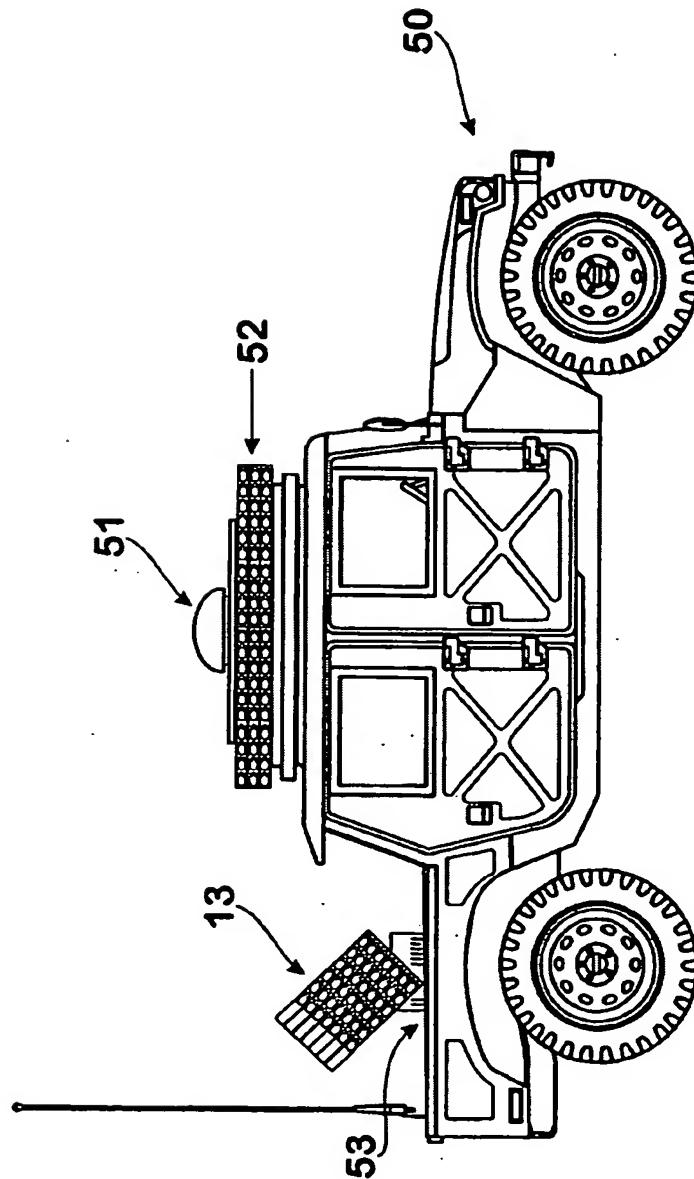


Fig. 4





**Fig. 5**

7 / 12

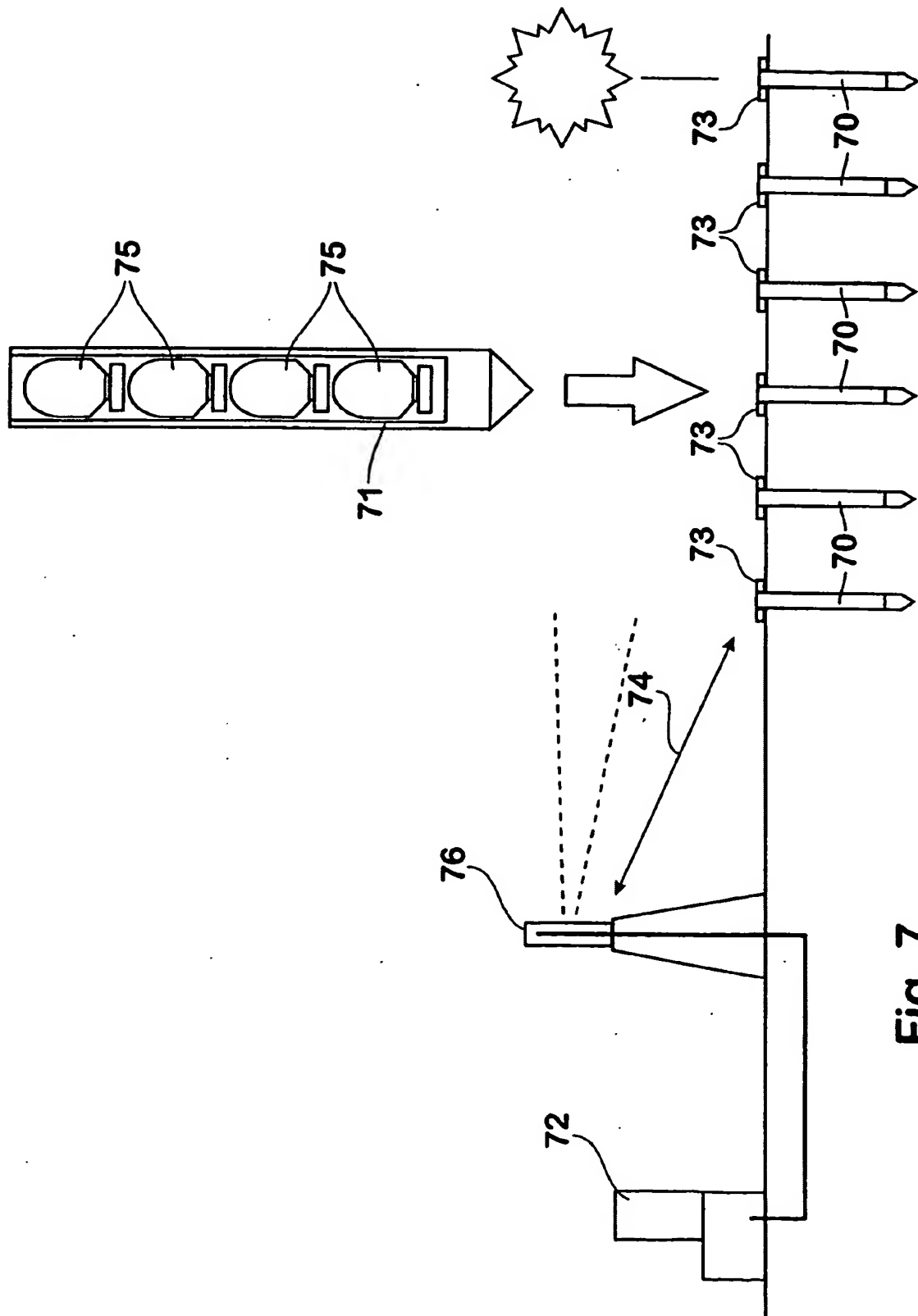


Fig. 7

8 / 12

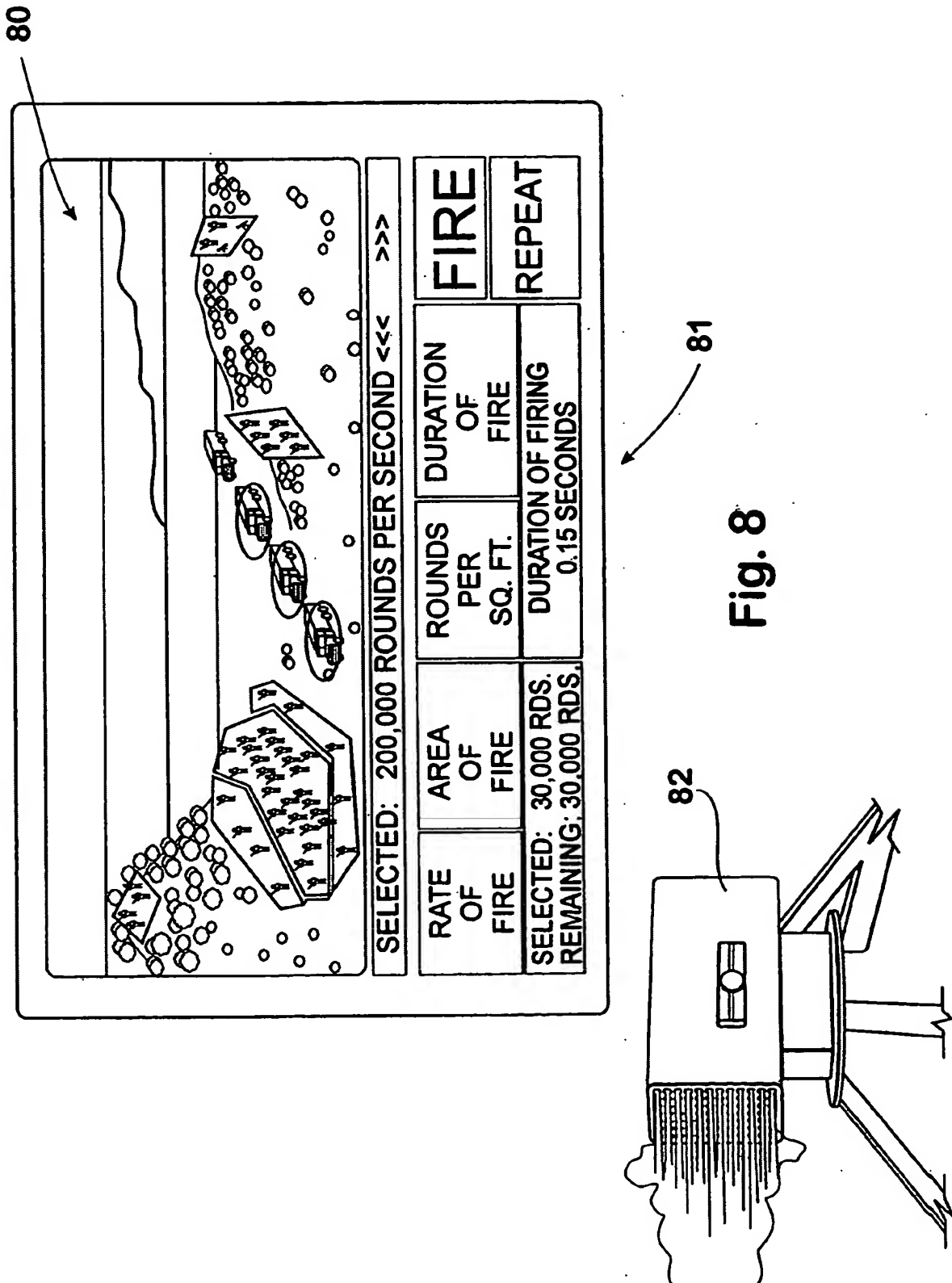


Fig. 8

9 / 12

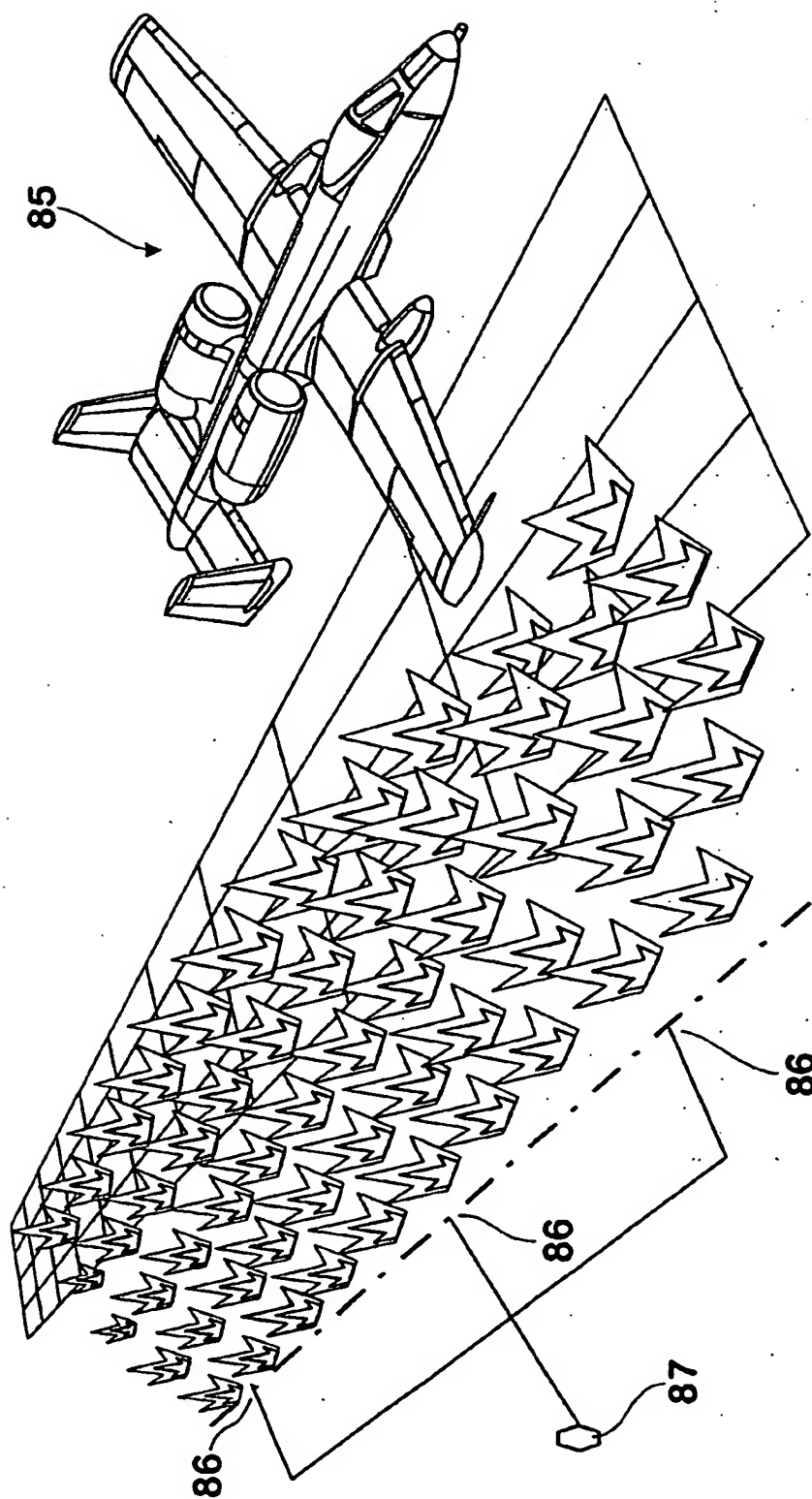


Fig. 9

12 / 12

Minefield Replacement Concept

Weapon	Range	Maximum Simultaneous	Maximum Rate of Fire	Magazine	Dimensions	Weight Loaded
A Line-of-Sight 9mm Close-in Pod	91m	192	8.4M spm	768	100x305x150mm	16kg
B Line-of-Sight 25mm Air-Burst Pod	1829m	100	600,000 spm	800	355x355x1525mm	508kg
C 40mm Grenade Box 0.5 lb. Grenade	1554m	98	300,000 spm	588	305x760x610mm	204kg
D 81mm Mortar Box 9 lb Bomb	5669m	36	110,000 spm	144	610x610x2130mm	1315kg
E 160mm Mortar Box 96 lb Bomb	5120m	16	9,600 spm	48	760x760x3660mm	2450kg
F Helicopter (Stand-Off) Area Denial 40mm Grenade Pods		500	1.5M spm	3,000	305x760x1525mm	1089kg
G A-10 (Stand-Off) Area Denial 40mm Grenade Pods		1,764	5.2M spm	10,584	460x760x3660mm	3674kg
H Vehicle Mounted Anti-Ambush 40mm Grenade Circle	1554m	330	1M spm	2,500	1.8m Diam. x 460mm Deep	907kg
J Man portable Repeatable 9mm Claymore	18.3m	64	2.8M spm	256	100x100x150mm	6.4kg

Fig. 12